

**To:** Stephanie Vaughn/R2/USEPA/US@EPA[]  
**From:** "Stan Kaczmarek"  
**Sent:** Fri 12/14/2012 5:07:34 PM  
**Subject:** Fwd: LPR RM 10.9 Removal Action – Proposed Dredging Operations - Potential to Emit Calculations  
[LPR RM10 9 Dredging Air Emissions PTE to NJDEP.xlsx](#)  
[LPR RM10 9 Example VOC PTE Calculation for Dredging.pdf](#)  
[Superfund Tech Series - Estimating Air Emissions.pdf](#)

Stephanie,

Attached is what we had sent to NJDEP earlier in the week regarding Potential to Emit from dredging operations at RM 10.9

Stan

Date: Tue, 11 Dec 2012 13:17:08 -0500  
From: "Stan Kaczmarek" <StanK@demaximis.com>  
To: "Jay Nickerson" <jay.nickerson@dep.state.nj.us>,  
<Negib.HarFouche@dep.state.nj.us>,<Robert.Kettig@dep.state.nj.us>  
Cc: <Roger.McCready@CH2M.com>,"Willard Potter" <otto@demaximis.com>, "Robert Law" <rlaw@demaximis.com>  
Subject: =?UTF-8?Q?LPR=20RM=2010.9=20Removal=20Action=20=E2=80=93=20Propo?= =?UTF-8?Q?sed=20Dredging=20Operations=20-=20Potential=20to=20Emit=20Calc?= =?UTF-8?Q?ulations=20=20?=  
Content-Type: multipart/mixed; boundary="=\_\_Part3302A9B4.1\_\_="

Mime-Version: 1.0

Per the request of NJDEP, the CPG is providing an evaluation of the "Potential to Emit" (PtE) during proposed dredging operations for the RM 10.9 removal action.

Attached you will find the following items related to calculation of potential air emissions associated with the LPR RM10.9 dredging operations.

An Excel spreadsheet calculating potential emissions from dredging operations for the LPR RM10.9 removal action. Potential emissions were assumed to be coming only from the dredged sediment itself with no other portable/temporary combustion equipment being identified for this operation. VOC emissions were calculated based on Section 4.2 (Dredging) of EPA's Air/Superfund National Technical Guidance document "Models for Estimating Air Emission Rates from Superfund Remedial Actions" dated March 8, 1993. Emissions of Dioxins (2,3,7,8-TCDD), PCBs and mercury were estimated using NJDEP's published volatilization rates for processing/stabilizing dredge sediment.

An example calculation for potential 1,2-Dichlorobenzene emissions from LPR RM10.9 dredging operations utilizing the EPA guidance methodology.

A copy of the EPA's Air/Superfund National Technical Guidance document "Models for Estimating Air Emission Rates from Superfund Remedial Actions". Section 4.2 contains the emissions calculation methodology for VOC emissions from dredging operations.

It was discussed at the November 29th meeting that if the CPG provided this information to the Air Quality Permitting Program via Rob Kettig and Negib HarFouche, they would share and discuss it with the

enforcement side of the program to determine whether an air permit would be required for the dredging operations portion of the project. We also discussed the possibility that a permit may not be required due to the lack of potential VOCs. Our analysis appears to support that possibility because the PtE for the COPCs present in the RM 10.9 sediments is often orders of magnitude below the NJDEP Reporting Threshold; even the PtEs for TCDD and PCBs remain 3.5 to 4.5 times below the NJDEP Reporting Threshold.

Please reach out to me at 973-978-9621 or by replying to this email if you have any questions or would like to arrange for a teleconference / meeting with our regulatory specialists to examine this data and analysis in more detail.

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